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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/559,817	04/25/2000	Alan K. Walbeck	INTELOG.034A	2997

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EXAMINER	
BILGRAMI, ASGHAR H	

ART UNIT	PAPER NUMBER
2143	

DATE MAILED: 05/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/559,817	WALBECK ET AL.	
	Examiner	Art Unit	
	Asghar Bilgrami	2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) _____ is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-27 rejected under 35 U.S.C. 103(a) as being unpatentable over Beyda et al (U.S. 5,935,218) and further in view of Ratner et al (U.S. 5,684,826).

3. As per claims 1, 13, 17 & 25, Beyda discloses a method for arbitrating use of a network medium to avoid collisions caused by multiple nodes attempting to transmit data on the network medium at the same time, said method comprising the steps of: sending a token packet from an active server to a first client node, said token packet granting network medium access to said first client node; (col. 2, lines 37-67 & col.3, lines 1-11), sending an end of token session packet from said first client to said server, said end of token session packet relinquishing network medium access by said first client node (col. 3, lines 12-76 & col.4, lines 1-9).

In the same field of endeavor Beyda did not disclose in detail the waiting for a prescribed time period after receipt of said end token session packet to allow a second client node to send a lineup insertion packet to said active server.

However Ratner discloses that in order to avoid collision data can be buffered in the processor before being sent to its destination waiting for a prescribed time period after receipt of said end token session packet to allow a second client node to send a lineup insertion packet to said active server (col.5, lines 40-67 & col.6, lines 1-38). One in the ordinary skill in the art can establish the relationship between lining up insertion packets and buffering data before dissemination. Accordingly it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate buffering of data while waiting to transmit on the channel as described by Ratner with Beyda's art which describes a client/server data communication/transfer network system. In doing so it would result in minimizing the collision of packets and improving the traffic and reliability of the network and as result making the network more robust and scalable.

4. As per claim 2, Beyda-Ratner disclosed the method of Claim 1, wherein said active network server maintains a lineup card that lists one or more client nodes (Ratner, col.5, lines 40-67 & col.6, lines 1-38).

5. As per claim 3, Beyda-Ratner disclosed the method of Claim 1, wherein said token packet specifies a maximum number of packets that said first client can send before sending said end of token session packet (Beyda, (col. 3, lines 12-76 & col.4, lines 1-9).

6. As per claim 4, Beyda-Ratner disclosed the method of Claim 3, wherein said first client node is allowed to transmit data packets on said network medium only during a token session (Beyda, col. 3, lines 12-76 & col.4, lines 1-9).

7. As per claim 5, Beyda-Ratner disclosed the method of Claim 3, wherein said first client node is removed from said lineup card when said node has been inactive for a period of time (Ratner, col.5, lines 40-67 & col.6, lines 1-57).

8. As per claim 6, Beyda-Ratner disclosed the method of Claim 3., wherein said lineup insertion packet requests insertion onto a high priority queue (Beyda, col. 3, lines 12-76).

9. As per claim 7, Beyda-Ratner disclosed the method of Claim 1 wherein a presence of a packet is detected by matching a specified preamble and length sequence (Ratner, col. 7, lines 43-56).

10. As per claim 8, Beyda-Ratner disclosed the method of Claim 1, wherein access to said medium is provided by a media access control layer (Beyda, col. 6, lines 3-12).

11. As per claims 9 & 20, Beyda-Ratner disclosed the method of Claim 8, wherein said media access control layer provides a burst mode (Beyda, col. 5, lines 2-49 & col.6, lines 1-12).

12. As per claims 10, 18 &19, Beyda-Ratner disclosed the method of Claim 1, wherein said medium provides multiple channels (Ratner, col. 3, lines 59- 67 & col. 4, lines 1-32).

13. As per claims 11, 21 & 26, Beyda-Ratner disclosed the method of Claim 1, wherein said medium is a power line (Ratner, col. 2, lines 46-67 & col.3, lines 34-58).

14. As per claims 12, 22 & 27 Beyda-Ratner disclosed the method of Claim 1, wherein said medium is a radio frequency transmission medium (Ratner, col. 1, lines 17-28).

15. As per claim 14, Beyda-Ratner disclosed the network architecture of Claim 13, wherein said active server node maintains a lineup card of active client nodes, said lineup card comprising a high priority queue and a low priority queue (Ratner, col. 5, lines 40-67 & col. 6, lines 1- 38).

16. As per claim 15, Beyda-Ratner disclosed the network architecture of Claim 13, wherein said active server node polls all nodes listed on said high priority queue before polling a next node listed on said low priority queue (Beyda, col.3, lines 11-61)

17. As per claim 16, Beyda discloses a method for transmitting data on a network medium, said network medium comprising a plurality channels, comprising: obtaining a plurality of data packets in a source node; transmitting said data packets, one data packet per channel, to a destination node (Beyda, col.2, lines 37-67, col. 3, lines 1- 67 & col. 6, lines 3- 12).
In the same field of endeavor Beyda does not describe in detail of receiving a multi-channel acknowledgement from said destination node, said multi-channel acknowledgement transmitted on all of said channels, said multi-channel acknowledgement providing acknowledgement information for each of said channels.
However Ratner discloses multiple simultaneous communications over a network to acknowledge information transferred (Ratner, col. 9, lines 38-67 & col.10, lines 1-39).
It would have been obvious to one in the ordinary skill in the art at the time the invention was made to incorporate multi-channel acknowledgement functionality as described by Ratner with a network transmitting data as described by Beyda to improve the reliability of the transmitted data on the network.

18. As per claim 23, Beyda-Ratner disclosed the data network of Claim 17, wherein each of said active server prioritizes a plurality of client node means (Beyda, col. 2, lines 37-67 & col. 3, lines 1- 61).

19. As per claim 24, Beyda disclosed a method for sending data on a multi-channel network medium comprising the steps of: sending said plurality of fragments to a destination node (col. 3, lines 1- 61 & col. 6, lines 2-12)

In the same field of endeavor Beyda did not disclose in detail receiving a response indicating which of plurality of said fragments were received and which of said plurality of said fragments that were lost; and resending said fragments that were lost.

However Ratner disclosed the verification process whether the data bytes transmitted have reached their destination (col. 7, lines 57-67, col.8, lines 1-67 & col.9, lines 1-17).

It would have been obvious to one in the ordinary skill in the art to incorporate verification of the sent data and resending the data that was lost as described by Ratner with sending plurality of fragments to a destination node as taught by Beyda so as to improve the effectiveness and robustness of the network and achieve assured communications.

Response to Arguments

Applicant's arguments filed 16 February 2006 have been fully considered but they are not persuasive.

20. In response to applicant's arguments against the references individually one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

21. Applicant argued that claim 1 discloses that all nodes do not have equal right to access the network whereas in Beyada all nodes have equal right to access the network.
As to applicants argument, the language of claim 1 does not specifically states that all nodes do not have equal right to access the network.

22. The applicant argued, "Beyda does not teach or suggest (sending) token packet from an active server to a first client node, sending an end of token session packet."
As to applicant's arguments Beyda shows the transmission of data (packets having header information) between devices (e.g. server, pc, router or nodes) please refer to (col.2, lines 38-49). As to " sending the end of session token packet" please see col.3, lines 35-44) in which Beyda does not specifically show the end of session token packet but it describes that the processing of the transmission packets end once all the data packets have been transmitted therefore and the end of transmission is conveyed to the device.

23. The applicant argued, "The data buffer referred to by the examiner in Ratner is not lineup data corresponding to a lineup insertion packet. Ratner does not teach or suggest lineup insertion packets".
As to applicants arguments Ratner clearly describes lining up (FIFO) of data (packets) in a buffer before transmission (col.5, lines 40-67 & col.6, lines 1-38).

24. As to applicants arguments to claims 2-26, instead of stating that "the cited combination does not teach or suggest..." the applicant must discuss the references applied against the claims, explaining how the claims avoid the references or distinguish them.

Conclusion

25. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Asghar Bilgrami whose telephone number is 571-272-3907. The examiner can normally be reached on M-F, 8:00-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Asghar Bilgrami
Examiner
Art Unit 2143

AB

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